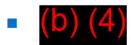
ARNOLD PORTER KAYE SCHOLER

EPA / ARB / Kohler Meeting – July 27, 2017 Settlement Confidential

apks.com

Kohler Agenda Items

Kohler Introductions, Overviews and Perspectives



Input on Certification Spreadsheet

Kohler Perspectives



- **Key Legal and Equitable Factors**
 - Relevance of Kohler's comprehensive transparency
 - Significance or materiality of various compliance issues
 - Regulatory complexity and history (e.g., test cycle)



Kohler Approach to This Matter

Self-Disclosure on Test Cycle and Calibration Issues - Kohler notified EPA and ARB on Dec. 24, 2015 (b) (4) Sought meetings in February/March and held April 7, 2016 meeting

Kohler Cooperation with Agencies

- Regular Meetings
 - Regular face-to-face meetings in El Monte and Ann Arbor
 - Monthly submissions of data, disclosures, responses to questions
- Major Effort to Address Valid Test Data
 - Discussed (b) (4) (agreed July 15, 2016)
- Attentive to Certification Status Throughout
 - Running changes to address compliance for MY 2015 and 2016
 - EPA prospective revocation of certifications for five EFI families
- Government Preference to Defer Enforcement Discussion Until Complete/Valid Data, and Kohler Agreed





Key Equitable Factors

- Kohler's Comprehensive Transparency and Examples
 - Approach to thorough AECD explanation and disclosure to



- Significance/Materiality for EPA/ARB Regulatory Program
 - Emissions impacts
 - Kohler recognizes other important regulatory program interests
- **Emissions of Carbureted Engines**
 - Differences on new cycle largely offsetting (some up, some down)

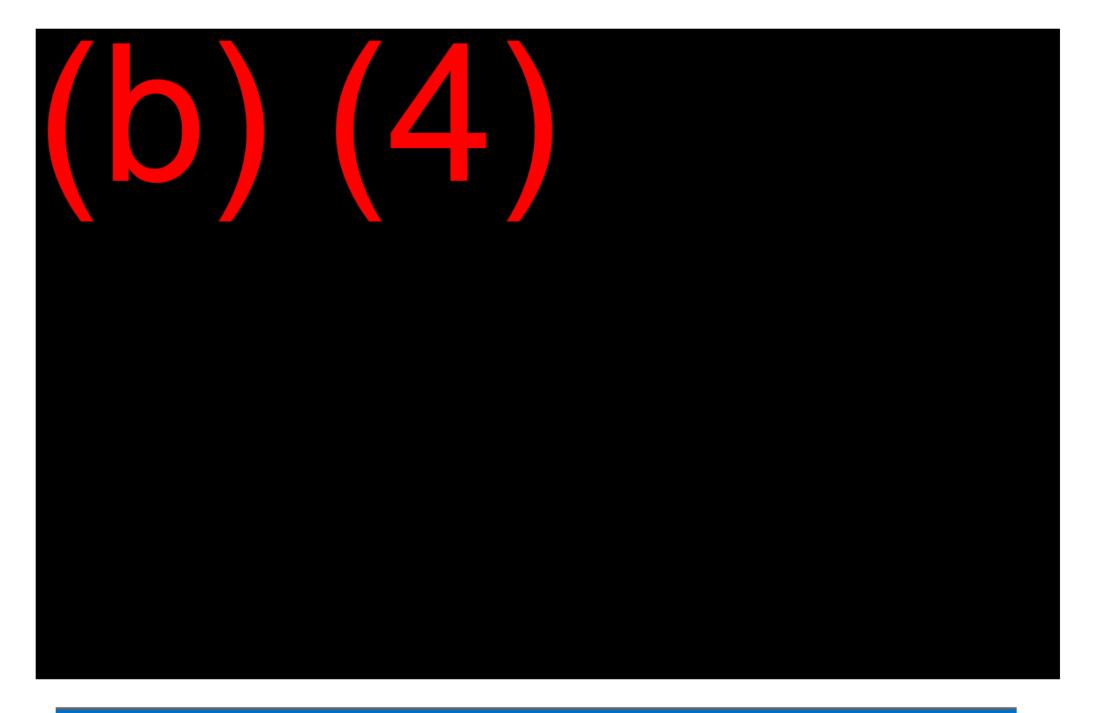


Legal Issues

- Test cycle selection
 - Many iterations of rules with varied definitions (variable and fixed speed)
 - Rated speed versus intermediate speed test
 - Complexity of specifying optional fixed versus governed speed test for certification (with potentially different EPA compliance test)
 - Application of current rule is not entirely self-evident for all families, as shown by extensive collaboration with agencies to determine protocol
- Running change requirements
 - Amendments to application required only for changes to information in original application
- Adjustable parameters
 - Key relevant parameters
 - HSNL
 - Low-idle
 - Adjustments to HSNL would not affect results on allowed fixed speed test cycle, so engines would always comply on that test "across adjustable range"
- MY 2016 volumes
 - MY 2016 volume to include only pre-recalibrated volume for revoked families
 - Kohler confirmation regarding MY 2016 designations

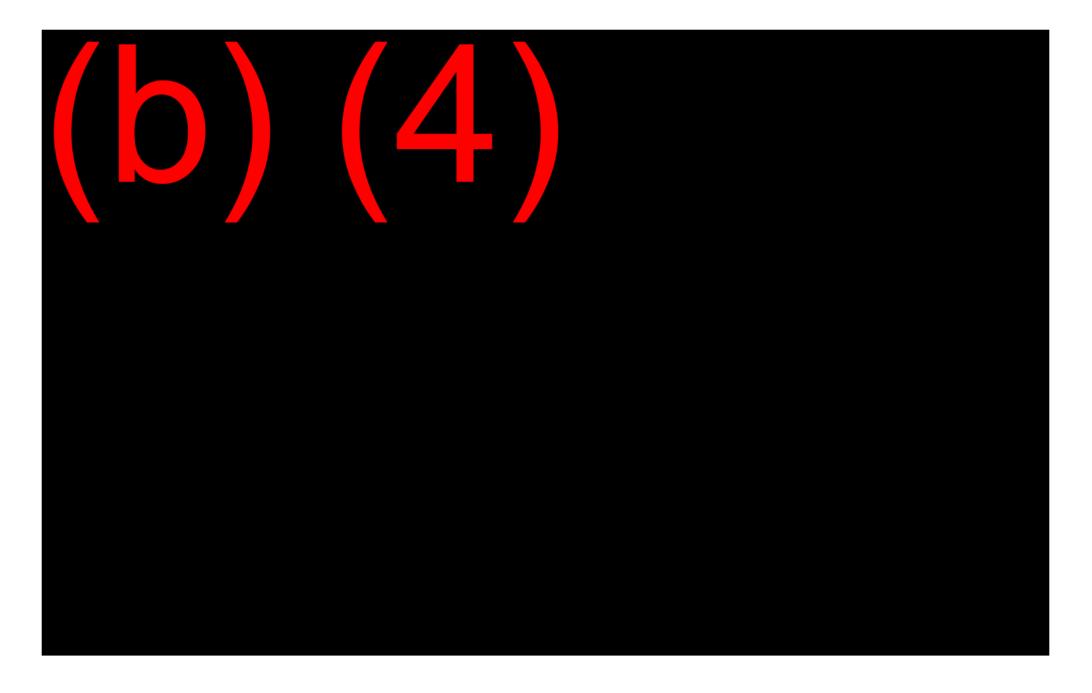
- - 6942PC, 7472NC, 8242ND, 8242PD, 7472ND
 - EPA revoked certificates for these families as of Dec. 16, 2016

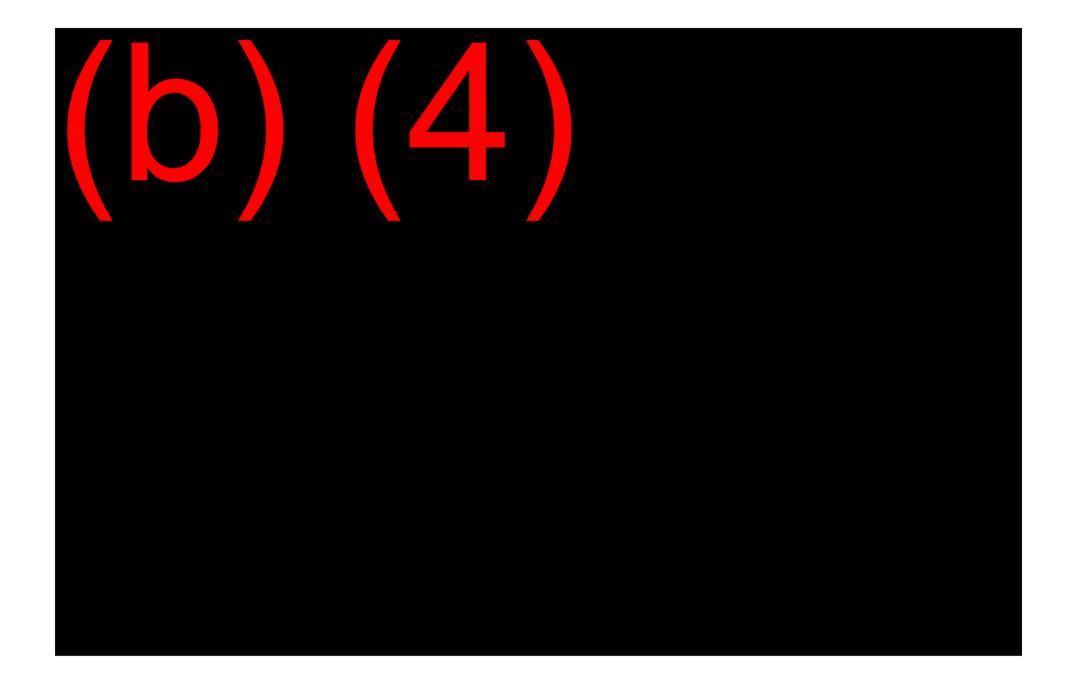




Corrective Action Impacts

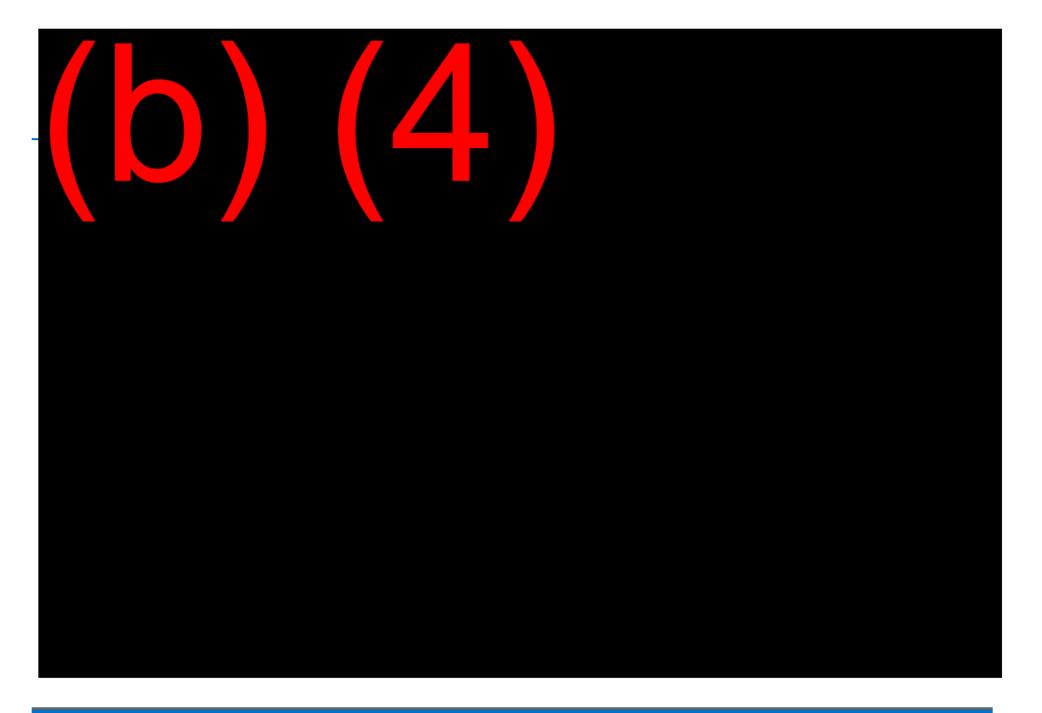
Engine Family	(b) (4)	Model	Test Results HC + NOx (g/kW-hr)		Deteriorated Results (g/kW-hr) (HC+NOx)
			DF	Low -hour	
_KHXS.8242PD		ECV880	1.268	11.24	14.25
		ECV880	1.000	6.13	6.13
GKHXS.8242ND		PCV860	1.4	12.59	17.62
		PCV860	1.213	5.67	6.87
GKHXS.7472ND		PCH740	1.4	11.43	16.00
		PCV740	1.213	6.86	8.32
_KHXS.7472NC		PCV680	1.4	10.58	14.81
		PCH740	1.213	6.7	8.12
_KHXS.6942PC		ECV650 (ECV630)	1.498	8.58	12.85
		ECV630	1.143	7.50	8.57

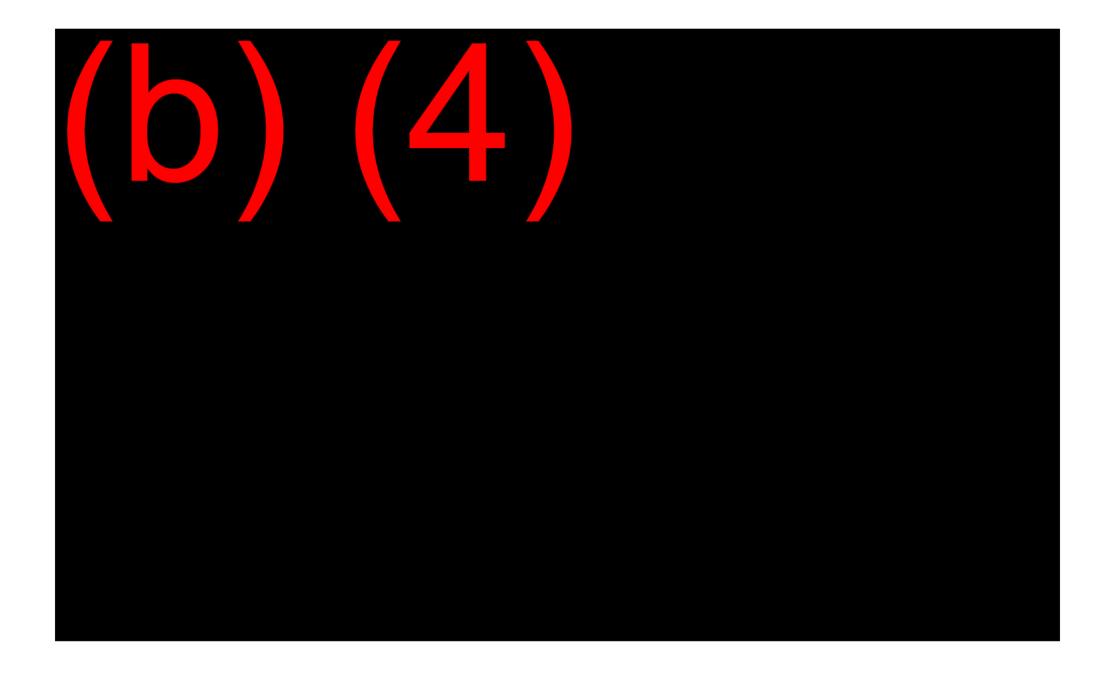


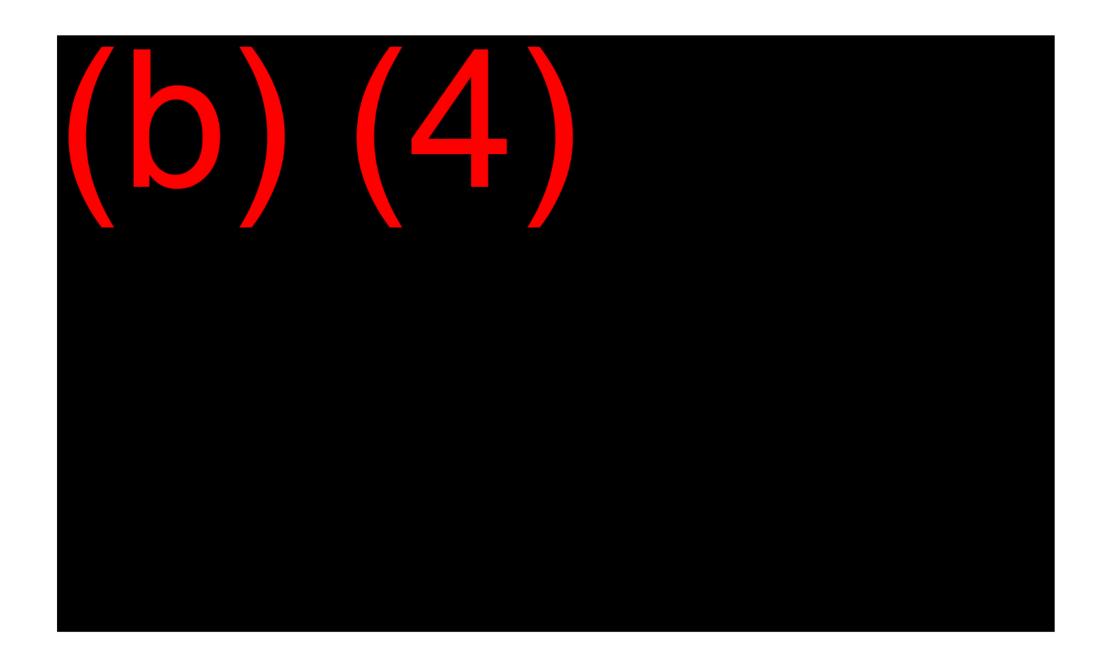


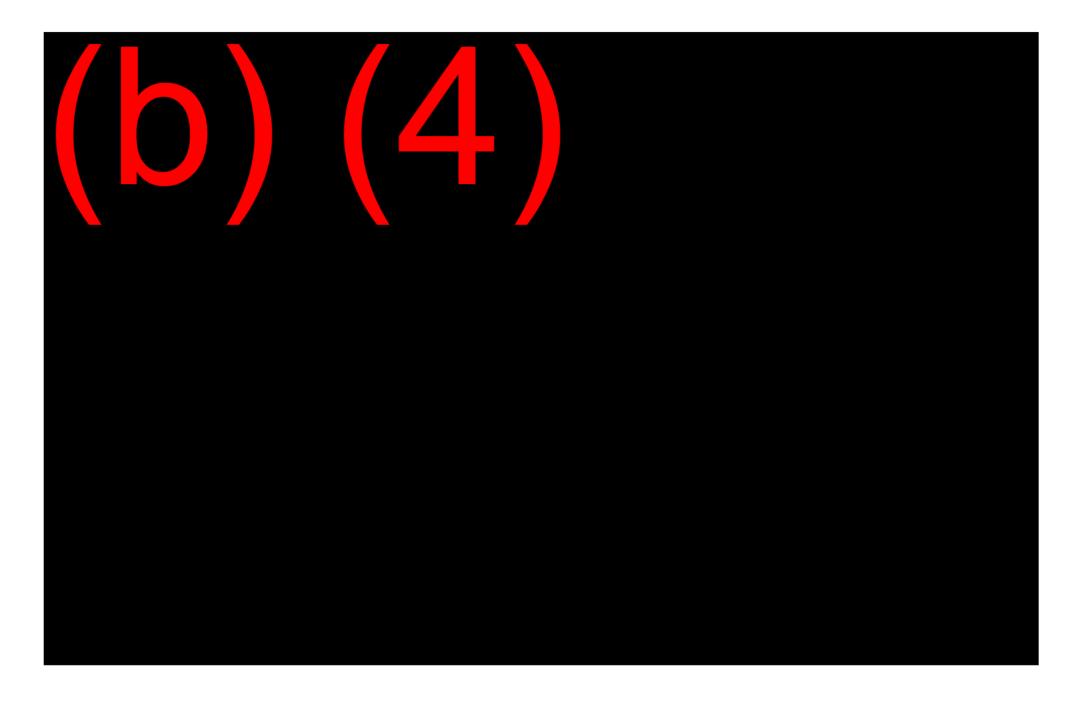


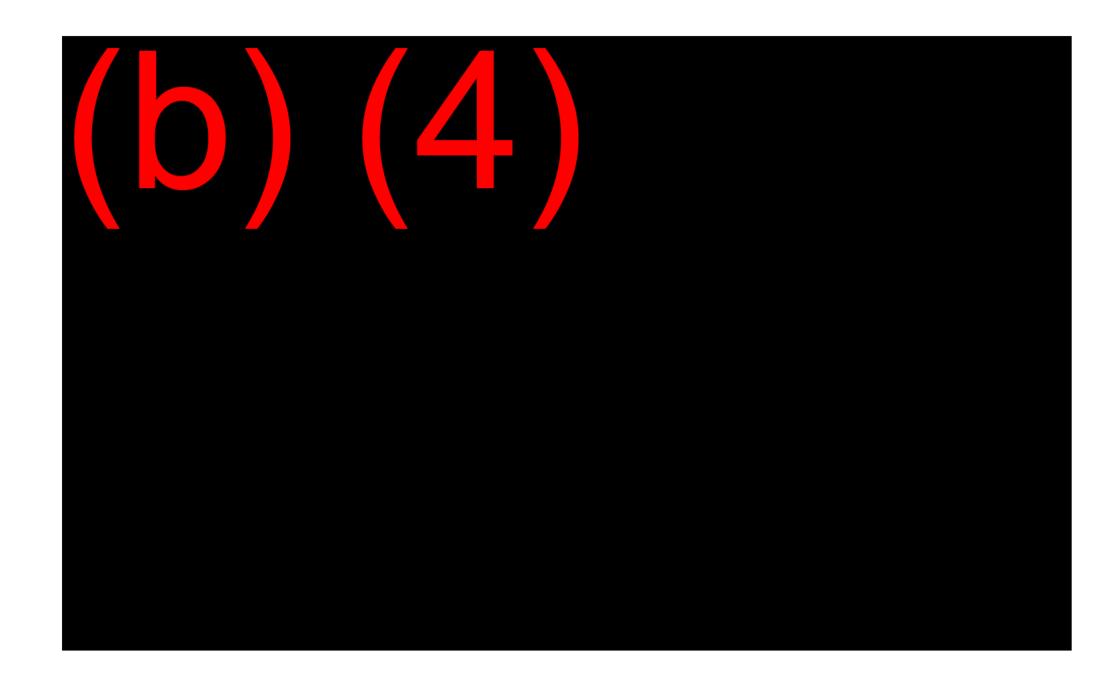
- 9992NA/9992DA (constant speed genset) basis for EPA table unclear
 - Certified under 40 CFR Part 60







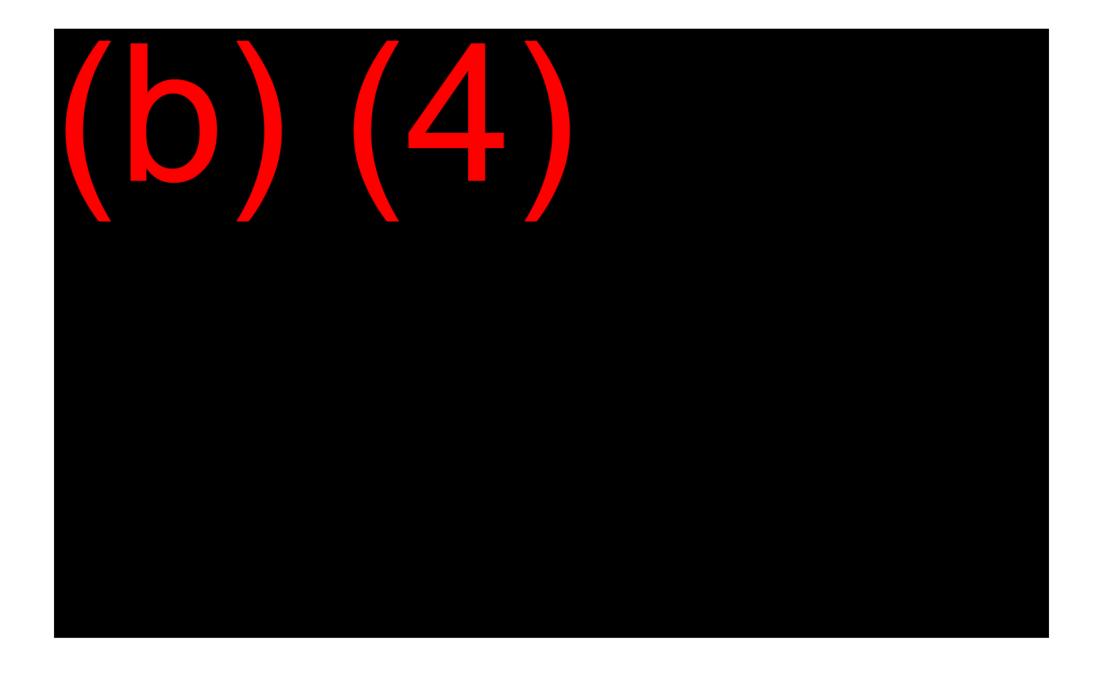


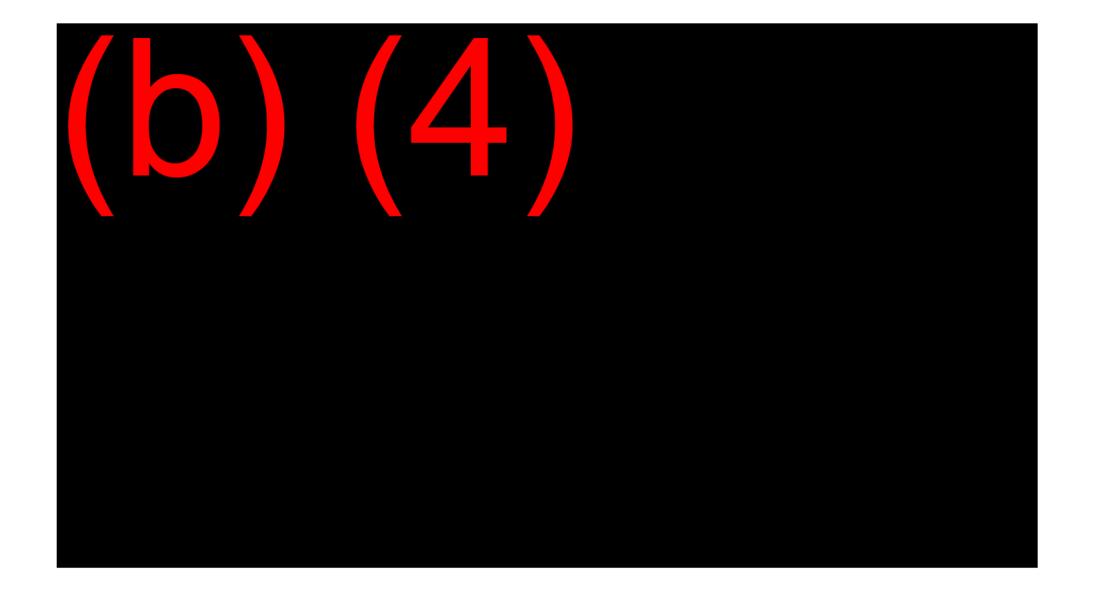




- Legal requirements
 - Definition/disclosure based on impact during testing or during normal in-use operation but can be excluded if customers would not alter in manner that affects emissions (40 CFR §§ 1054.801 and 1054.205(q))
 - Compliance obligation across adjustable range is based on impact during emissions test cycle (40 CFR § 1054.115(b))







Next Steps

- Kohler
- Government